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UNITED STATES  
DEPARTMENT OF AGRICULTURE  
BUREAU OF ANIMAL INDUSTRYCOOK PORK AND ITS PRODUCTS  
THOROUGHLY

PORK forms an important part of the diet in most American families. As with many other foods, certain hygienic precautions are needed in preparing pork for food purposes. Most fruits and vegetables are washed or peeled. Milk is commonly pasteurized to destroy harmful bacteria that may be present. Water supplies are treated, if necessary, for purification and safety to health. Proper cooking is a valuable scientific safeguard in the case of numerous foods, including pork. Fresh pork should always be cooked so that it is "done" throughout.

*Reasons for Thorough Cooking*

COOKING is necessary since a small percentage of hogs harbor a parasite known scientifically as *Trichinella spiralis*. The common name of the parasites is trichinae. They are extremely small and are not seen except upon microscopic examination. Even then they are likely to escape detection. The parasites cause hogs that survive the disease no particular inconvenience so far as can be judged from the external appearance of these animals, and when pork from affected hogs is cooked the organisms are no more dangerous than bacteria in pasteurized milk, in purified water, or in canned vegetables. But failure to cook fresh pork thoroughly may result in a condition known as trichinosis.

The seriousness of this ailment depends on the number of live trichinae in the pork eaten. Slight infestation following the consumption of moderate quantities of lightly infested pork that is raw or imperfectly cooked may pass unnoticed or may cause but slight illness. But the consumption of heavily infested pork or of large quantities of raw or imperfectly cooked pork that is lightly infested may produce a painful and sometimes fatal attack of trichinosis. Common symptoms are nausea, vomiting, diarrhea, severe abdominal pains, general dullness, weakness, twitching of muscles, and sensations of tension and pain in the muscles. In later stages of the disease the eyeballs may become inflamed or show small hemorrhages. Swelling of the legs, forearms, abdominal wall, and face may occur, sometimes with skin eruptions. Muscular pain is an outstanding symptom of trichi-

nosis. Fever is commonly present during the first stage of the disease, reaching its height in about 10 days after the first symptoms. The symptoms are by no means constant, and typical cases have sometimes been diagnosed as typhoid fever, undulant fever, meningitis, and other diseases. When patients are seen by a physician within a few days after eating the trichinous pork and the disease is correctly diagnosed, some good may follow attempts to expel the parasites from the digestive tract.

### *Main Sources of Trichinosis*

THE DISEASE is most commonly found among persons of foreign origin or descent. The reason is that people of certain European countries often retain their native fondness for raw or imperfectly cooked pork. Trichinosis is not limited to people of such foreign descent, however, since many affected persons have been of American birth or of American ancestry.

Outbreaks of trichinosis occur at all seasons of the year but usually in winter, especially during the holidays when various products containing pork are eaten without proper cooking in some households. Besides fresh pork and sausage, and smoked hams and shoulders, and bacon that may not be thoroughly cooked, such products as smoked sausage, boneless loins, capicola, coppa, and forms of dry or summer sausage, if prepared in establishments not operated under Federal meat inspection or other competent inspection, are the main sources of trichinosis in this country.

There are cases of entire families being stricken as a result of eating uncooked or improperly cooked sausage or other products made from the meat of one hog. Even tasting uncooked sausage during its preparation to ascertain when the seasoning is satisfactory may cause trichinosis. The consumption of hastily cooked hamburgers consisting of a mixture of ground beef and pork is likely to cause trichinosis. Numerous cases have resulted from the serving of uncooked pork products at a family gathering or reunion. In such cases the meat is usually from one hog and is more dangerous in this respect than pork products which are the composite result of the meat from many hogs, as in packing-house products. When the meat is obtained from several hogs, the chance of many of the parasites being present is reduced.

### *Pork is not Inspected for Trichinae*

THERE is no practicable system of inspection by which persons who eat uncooked pork can be protected from trichinae.

Under Federal meat inspection pork is not examined microscopically for trichinae. Although microscopic inspection would perhaps eliminate most of the heavily infested hog carcasses, many which would be dangerous were the meat eaten without proper treatment would be overlooked.

In the United States, in establishments operating under Federal meat inspection, pork products of any kind that are customarily eaten without cooking by the consumer are especially processed to destroy trichinae and are thus rendered safe. These methods of processing, which involve cooking, special freezing, or special curing, are conducted under the close scrutiny of the inspector. The methods other than cooking are not applicable to the preparation of pork products in the home and on the farm.

### *Large Pieces Require More Cooking*

IN COOKING pork, remember that large pieces require much more cooking than small ones because the heat penetrates slowly into the center of the meat. Large pieces that are well cooked on the outside may be imperfectly cooked or even entirely raw at the center. The housewife should, therefore, use care in preparing pork to see that it is thoroughly cooked throughout if trichinosis is to be avoided. Particular care should be taken in cooking pork chops well done to the bone. A good test for "doneness" of chops and also of loin roasts is to make small incisions next to the bone as well as into the thicker part of the meat to be sure that the meat is thoroughly cooked. For hams and shoulders the only sure guide to sufficient cooking is a meat thermometer stuck into the center of the thickest portion of the cut to show when the meat is well done all through. However, 30 minutes to the pound is an approximate guide to sufficient cooking of large thick cuts of pork. The consumer is reminded also that frozen or very cold meat requires a longer period of cooking than meat of ordinary temperature. Processed sausage should always be cooked unless the consumer knows definitely that these products were especially processed, under Federal supervision or equally reliable State or local supervision, to be eaten without cooking. Sausage purchased from farmers and peddlers should be cooked in all cases.

The thorough cooking of pork is advisable not only for hygienic reasons, but also for the development of a rich flavor. The Bureau of Home Economics, U. S. Department of Agriculture, makes the following recommendations: "Success in preparing pork cuts depends on regulating the

heat so as to cook the meat well done to the center of the piece, and at the same time to keep the outside from becoming hard and dry. Moderate cooking temperature is best after the surface has been browned to develop rich flavor."

### *The Poster is a Reminder*

AS A REMINDER to the public, the U. S. Department of Agriculture has prepared a poster, reproduced herewith, entitled "Cook Pork and Its Products Thoroughly." Small-sized copies have been prepared in the English, German, and Italian languages. A larger size, in English and in colors, has been prepared for display in meat shops. The display of this poster is entirely voluntary and represents the cooperation of the meat trade with the U. S. Department of Agriculture for the benefit of the public.

